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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,015	09/30/2003	Jerry E. Tysinger	5483-025	3228
25184	7590	10/19/2007		
WILLIAM J. MASON MACCORD MASON PLLC POST OFFICE BOX 1489 WRIGHTSVILLE BEACH, NC 28480			EXAMINER CARR, DEBORAH D	
			ART UNIT	PAPER NUMBER
			1621	
			MAIL DATE	DELIVERY MODE
			10/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/677,015

Applicant(s)

TYSINGER, JERRY E.

Examiner

Deborah D. Carr

Art Unit

1621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,10-17 and 19-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4,6,7,11,13,15-17,19,20 and 30 is/are allowed.
- 6) ☒ Claim(s) 5 10 12 14 21-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 5, 12, 24-26, 28-29 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for solvent extraction followed by caustic refining of the extracted oil, does not reasonably provide enablement for mechanical extraction followed by caustic refining of the extracted oil or solvent extraction followed by physical refining. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

Regarding claims 5, 24-25, and 29 it is clearly stated on pages 7-8, caustic refining is limited to oil that has been extracted using a solvent. Free fatty acids are removed from mechanically extracted oil via physical refining and free fatty acid removal via physical refining is not feasible do to the large amount of non-hydratable phospholipids in the oil. Therefore the use of caustic refining of mechanically extracted oils and physical refining of solvent extracted oils is not enabled.

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3. Claims 21 & 28 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for soybean flakes to hexane ratio of 1:0.5 to about 1:0.85, does not reasonably provide enablement for a hexane to soybean in a ratio of less than 1:1. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

It is clear on page 11 the amount of soybean flakes ranges from 0.5 to 0.85. Any amounts above or below this range are not enabled by the specification. Also it should be noted that soybean flakes are used to determine this ratio. One of ordinary skill in the art knows that flakes having more surface area would need less solvent than the whole soybean. There is no enablement for soybeans in reference to hexane and one would not assume the amount of hexane needed for soybean flakes is the same amount needed for whole soybeans.

4. Claims 12 & 26 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for heating the soybeans prior to mechanical extraction to a temperature range of from about 300°F to about 370°F, does not reasonably provide enablement for heating the soybeans prior to mechanical extraction to a temperature range of from about 300°F to about 370°F. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

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It is clear on page 7 the heating the soybeans prior to mechanical extraction to a temperature range of from about 300°F to about 370°F. Also it should be noted that the length of heating within this temperature range appears to be a critical element and should be included in the claims.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 7, 10, 12, 14, 22, 27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 11 states the soybeans where mechanically extracted therefore is unclear why claims 7, 12, 14 repeats that the soybeans are mechanically extracted.

Claim 16 states the soybeans where solvent extracted therefore is unclear why claim 22 repeats that the soybeans are solvent extracted.

7. Claims 10, 23 & 27 rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: steps needed to transesterfy the extracted soybean oil and convert the extracted second oil into a biodiesel fuel.

***Allowable Subject Matter***

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8. Claims 1, 4, 6-7, 11, 13, 16-20, 30 are allowed allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah D. Carr whose telephone number is 571-272-0637.

The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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